Air Quality Impacts

The environmental document should contain a brief discussion of the transportation-related air quality concerns in the project area and a summary of the project-related carbon monoxide (CO) analysis if such analysis is performed. The following information should be presented, as appropriate.

a) Mesoscale Concerns: Ozone (O_3), Hydrocarbons (HC) and Nitrogen Oxide (NO_x) air quality concerns are regional in nature and as such meaningful evaluation on a project-by-project basis is not possible. Where these pollutants are an issue, the air quality emissions inventories in the State Implementation Plan (SIP) should be referenced and briefly summarized. Further, the relationship of the project to the SIP should be described by including one of the following statements:

   (1) This project does not add capacity and therefore does not require conformity analysis.

   (2) This project is in an area where the SIP does not contain any transportation control measures. Therefore, the conformity procedures of 40 CFR 93 do not apply to this project.

   (3) This project is included in the Transportation Plan approved on (***approval date***), on page (***indicate TP page #***) and the Transportation Improvement Program for the (***indicate appropriate Metropolitan Planning Organization and page # of the TIP where the project is listed***). Therefore, pursuant to 40 CFR 93, this project conforms to the SIP.

b) Microscale Concerns: An air analysis is not required for projects such as bridge replacements (on or close to the existing horizontal alignment), road resurfacing, intersection reconstruction (in order to provide turn lanes) and traffic signal modernizations. According to the Indiana Department of Environmental Management, these types of projects are considered non-major in scope and will not generate additional traffic volumes. Therefore, they will in no way lessen the air quality of an area. In addition, one of the two conformity statements listed at the beginning of this section should be included.

   For projects where air quality carbon monoxide (CO) impacts are judged to be minimal or insignificant, a brief statement to this effect is sufficient. Air quality CO impacts are judged minimal or insignificant when the project CO contribution plus background level are known to be well below the one (1) hour and eight (8) hour National Ambient Air Quality Standard (or other applicable standard). The basis for the judgment of minimal or insignificant CO impacts, such as previous specific analyses for similar projects, previous general analyses for various classes of projects, or simplified graphical analyses, should be stated.

For all other projects, a specific air analysis will probably be required. Consultants will be responsible for conducting these studies.

For those projects where a microscale CO analysis is performed, each reasonable alternative should be analyzed for the estimated time of completion and design year. A brief summary of the methodologies and assumptions used should be included in the document. Lengthy discussions, if

needed, should be included in a separate technical report and referenced in the environmental. Total CO concentrations (project contribution plus estimated background) at identified reasonable receptors for each alternative should be reported. A comparison should be made between each alternate and the applicable State and national standards. Use of a table for this comparison is recommended for clarity.

As long as the total predicted 1-hour CO concentration is less than 9 ppm (the 8-hour CO standard), no separate 8 hour analysis is necessary. If the 1-hour CO concentration is greater than 9 ppm, an 8-hour analysis should be performed. Where the preferred alternative would result in violations of the 1 or 8-hour CO standards, an effort should be made to develop reasonable mitigation measures through early coordination between FHWA, EPA, and appropriate State and local highway and air quality agencies. The document should discuss the proposed mitigation measures and include evidence of the coordination.